

Web Application Project

ITP 460 (4 Units)

Course 31934R, Spring 2017



Objective

This course is intended to give experienced web developers practical industry theory, skills, and experience. Students will build websites for actual clients. They will work in teams with assigned roles, developing the site throughout one semester and following the traditional development stages and cycles.

Concepts

Students will be taught important development theory including: methodologies and frameworks; project planning and resource management; project roles and collaboration; information architecture; applied database design and implementation; user interface design and testing; version control; quality assurance; testing and debugging; documentation; and migration and updating projects.

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| Prerequisites | Upper division ITP Web courses or equivalent experience. |
| Instructors | Yuanbo Wang (yuanbo@usc.edu) Zune Nguyen (tridungn@usc.edu) |
| Office Hours | Check class website |
| TA | TBA |
| Grader | TBA |
| Lecture and Lab | Wednesdays 5 – 9 pm, KAP 164 |
| Website | http://uscitp.com/spring-2017/itp460/ |
| Optional Textbooks | <p>Optional Materials</p> <p><u>Running Lean</u>, 2nd Edition © 2012, Ash Maurya, O’Reily, ISBN-10: 1449305172, ISBN-13: 978-1449305178. Purchase hard cover book here: http://www.amazon.com/Running-Lean-Iterate-Works-Series/dp/1449305172</p> <p><u>Growth Hacking Marketing</u>, 2nd Edition © 2014, Ryan Holiday, Portfolio (Penguin), ASIN: B00TFR6OCM. Part of Kindle Owner’s Lending Library and Kindle Unlimited. If needed, purchase the paperback or ebook here: http://www.amazon.com/Growth-Hacker-Marketing-Primer-Advertising/dp/1591847389</p> |

Grading

The following percentage breakdown will be used in determining the grade for the course.

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| Individual Assignments | 10% |
| Group Assignments | 25% |
| Labs and Attendance | 15% |
| Milestones | 20% |
| Individual Contributions | 30% |
| <hr/> | |
| Total | 100% |

Grading Scale

The following shows the grading scale to be used to determine the letter grade.

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| A | 100-93 |
| A- | 92-90 |
| B+ | 89-87 |
| B | 86-83 |
| B- | 82-80 |
| C+ | 79-77 |
| C | 76-73 |
| C- | 72-70 |
| D+ | 69-67 |
| D | 66-63 |
| F | 62 or below |

Policies

Due dates and requirements for all Labs and Assignments will be posted on the course site. Students will “post” their work to their USC web space as defined on the course site.

The course will have both individual and group assignments. Labs and assignments will often be due at different times of the week. It is each student’s responsibility to keep track of due dates and post work on time as specified on the course site, even if they miss class. Work turned in late will lose 10% credit per day and late work is not accepted after two weeks past the due date. To receive credit for late work you MUST email the grader that you posted a lab or assignment after the due date or you will not receive credit.

Attendance is very important in this course. An attendance sheet will be circulated each lecture. You must sign in for lecture to receive lecture attendance credit. Just as in an actual development firm, missing sessions and meetings will have negative consequences.

IT Help

Hours of Service: 8AM-9PM; Phone: 213-740-0517; Email: engrhelp@usc.edu

Incomplete and Missing Grades

Excerpts for this section have been taken from the University Grading Handbook, located at <http://www.usc.edu/dept/ARR/grades/gradinghandbook/index.html>. Please see the link for more details on this and any other grading concerns.

A grade of Missing Grade (MG) “should only be assigned in unique or unusual situations... for those cases in which a student does not complete work for the course before the semester ends. All missing grades must be resolved by the instructor through the Correction of Grade Process. One calendar year is allowed to resolve a MG. If an MG is not resolved [within] one year the grade is changed to [Unofficial Withdrawal] UW and will be calculated into the grade point average a zero grade points.

A grade of Incomplete (IN) “is assigned when work is no completed because of documented illness or other ‘emergency’ **occurring after the twelfth week** of the semester (or 12th week equivalency for any course scheduled for less than 15 weeks).”

Academic Integrity

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one’s own academic work from misuse by others as well as to avoid using another’s work as one’s own. All students are expected to understand and abide by these principles. *Scampus*, the Student Guidebook, contains the Student Conduct Code in Section 11.00, while the recommended sanctions are located in Appendix A: <http://www.usc.edu/dept/publications/SCAMPUS/gov/>. Students will be referred to the Office of Student Judicial Affairs and Community Standards (SJACS) for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: <http://www.usc.edu/student-affairs/SJACS/>.

If the instructor, a grader, or a lab assistant suspects you of academic dishonesty, it has to be reported to SJACS. Do not share lab assignments with another student. Do not submit another student’s work as your own. Do not look at other students’ papers during exams. Do not leave the room during an exam. Do not cheat! As Trojans, we are faithful, scholarly, skillful, courageous, and ambitious.

Students with Disabilities

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to your course instructor (or TA) as early in the semester as possible. If you need accommodations for an exam, the form needs to be given to the instructor at least two weeks before the exam.

DSP is located in STU 301 and is open from 8:30am to 5:00pm, Monday through Friday. Contact info: 213-740-0776 (Phone), 213-740-6948 (TDD only), 213-740-8216 (FAX), ability@usc.edu, http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html.

Emergency Preparedness/Course Continuity in a Crisis

In case of emergency, when travel to campus is difficult, if not impossible, USC executive leadership will announce a digital way for instructors to teach students in their residence halls or homes using a combination of the Blackboard LMS (Learning Management System), teleconferencing, and other technologies. Instructors should be prepared to assign students a “Plan B” assignment that can be completed ‘at a distance.’ For additional information about maintaining your classes in an emergency, please access: <http://cst.usc.edu/services/emergencyprep.html>

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Course Outline

NOTE: Subject to Change

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|--------|---|
| Week 1 | Course Overview Project life cycle, Roles <i>(I) Assignment: Student Background Questionnaire</i> |
| Week 2 | Project pitches Agile Development Sprint Development Cycle JIRA <i>Milestone: Teams formed</i> <i>(G) Assignment: Project Selection Form</i> <i>(G) Assignment: Tools Setup (JIRA, Google Drive, Slack, etc.)</i> |
| Week 3 | Wireframing & Prototyping First Client Meetings <i>(G) Assignment: Sitemap & Wireframes</i> |
| Week 4 | UI/UX Design <i>(G) Assignment: Prototypes</i> |
| Week 5 | Version Control <i>(I) Assignment: Git Commit</i> <i>Milestone: Prototypes Completed and Approved</i> |
| Week 6 | Development, Deployment, and Git Workflow <i>(G) Assignment: Landing Page Deployment</i> |
| Week 7 | Less/Sass CSS Minifying CSS & JS <i>(I) Assignment: Minify CSS & JS</i> |
| Week 8 | Web Frameworks, MVC, Laravel <i>(I) Assignment: Laravel Pages</i> <i>Milestone: Frontend Pages</i> |

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| Week 9 | Search Engine Optimization (SEO) |
| Week 10 | Third Party APIs <i>(G) Assignment: API Integration</i> |
| Week 11 | Testing & QA <i>(I) Assignment: Unit Testing</i> |
| Week 12 | Website Analytics <u><i>Milestone: Beta Build</i></u> |
| Week 13 | TBD |
| Week 14 | Going Live, Migration Plan, Maintenance <i>(G) Assignment: Site Manual - Migration Plan & Files</i> |
| Week 15 | Final Presentations <i>(I) Assignment: Peer Evaluations</i> <u><i>Milestone: Projects Deliverables</i></u> |